

Appl. No. 10/604,439
Amdt. dated July 06, 2006
Reply to Office action of March 06, 2006

REMARKS

Claims 1, 16, and 17 are objected to because they contain the trademark/trade name PCI Express. Examiner respectfully asserts the applicant to remove the trademark/trade name from the claim language and replace with appropriate generic terminology. Appropriate correction is required.

Claims 1, 16, and 17 are amended to remove all references to the trademark "PCI Express", as suggested by the Examiner. No new matter is entered. Consideration of claims 1, 16, and 17 is respectfully requested.

Claims 1-8, 14-16, 18 and 20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-12 of copending application No. 10/640440 (hereinafter referred to as '440).

Applicant has amended the claims of both the present invention and of copending application No. 10/640440 to make clear the material being patented and to prevent the above obviousness-type double patenting rejection. In particular, in the present invention, claims 1, 3, 6, 7, 16, 17 are amended to change the term "beacon signal" with "auxiliary-powered Signal Triggered Power Management (ASTPM)". Support for this amendment is located in paragraph [0014] stating, "a plurality of Beacon signals (when the device is provided only with auxiliary power)". Additionally, in copending application No. 10/640440, the terms "packet triggered PM (PTPM)" and "level triggered PM" are utilized to distinguish the two inventions. That is, the present invention is directed at an auxiliary-powered signal trigger, while the copending application is directed at a level triggered packet trigger. Therefore, the two inventions as claimed utilize different steps and should therefore not be found rejected as double patenting. Withdrawal of the nonstatutory obviousness-type double patenting is accordingly requested.

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Claims 1, 2, and 5 are rejected under 35 USC 103a as being unpatentable over Saunders et al. (US Patent No. 6,654,896 B1) (hereinafter referred to as Saunders) in view of

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Mowery et al. (US Patent No. 6,898,766 B2) (hereinafter referred to as Mowery)

Applicant asserts that claim 1 should not be found unpatentable over Saunders in view of Mowery for at least the reason that neither of said cited references teach the following step as is claimed in claim 1 of the present invention:

- 5 before the computer system is under the control of an operating system,
de-asserting the Pseudo-PME signal so that the voltage of the Pseudo-PME
signal changes from the second level to the first level; (emphasis added)

- The Examiner stated in the Office Action dated 03/06/2006 that "Saunders discloses the
10 controlling the system by the operating system when handling the power mode transition
signal; column 5, lines 58-64". Specifically, Saunders teaches, "... to cause the operating
system initiate a power mode transition or simply to alert the operating system of an
impending transition." (col 5, lines 58-64) Applicant points out that controlling the system
by the operating system when handling the power mode transition signal as taught by
15 Saunders is not equivalent and is not similar to the de-asserting the Pseudo-PME signal so
that the voltage of the Pseudo-PME signal changes from the second level to the first level
before the computer system is under the control of an operating system. As Mowery also does
not teach de-asserting the Pseudo-PME signal so that the voltage of the Pseudo-PME signal
changes from the second level to the first level before the computer system is under the
20 control of an operating system, applicant asserts that claim 1 should not be found
unpatentable over Saunders in view of Mowery. That is, even if combining the teachings of
Saunders and Mower, the resulting combination is still not equivalent to the present invention
as claimed in claim 1.

- 25 Applicant also asserts that claim 1 should not be found unpatentable over Saunders in
view of Mowery for at least the reason that there is no motivation to combine said cited
references to result in the present invention as claimed in claim 1.

However, applicant points out that the teachings of Saunders as a whole are

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directed at "handling of multiple compliant and non-compliant wake-up sources in a computer system" (see title), while the teachings of Mowery as a whole are directed at "simplifying integrated circuits with a common communications bus" (see title). The Examiner stated that the motivation to combine said references is "doing so would give the
5 added benefit of rapid integration of devices and peripherals into an integrated circuit through the combination of existing peripherals rather than creating a custom integrated circuit with a custom interface from scratch". However, applicant asserts there are no non PCI compliant devices to be dealt with in the design of Mowery and there are likewise no first and second communication buses that need to be coupled in the design of Saunders. Therefore, the two
10 inventions (i.e., of Saunders and Mower) when viewed as individual whole units do not suggest any benefit of combination and in fact appear to suggest against combining as they are both directed at different problems.

For at least these reasons, applicant asserts that there is no motivation to combine said cited references to result in the present invention. Additionally, as described above, even after
15 combining the teachings of Saunders and Mowery the result will still not be equivalent to the present invention as claim 1 of the present invention as neither of said cited references teach "before the computer system is under the control of an operating system, de-asserting the Pseudo-PME signal so that the voltage of the Pseudo-PME signal changes from the second level to the first level". Because claims 2-15 are dependent on claim 1, if
20 claim 1 is found allowable, so too should dependent claims 2-15. Reconsideration of claims 1-15 is respectively requested.

Claims 3, 4 and 9-13 are rejected under 35 USC 103a as being unpatentable over
Saunders et al. (US Patent No. 6,654,896 B1) (hereinafter referred to as Saunders),
25 Mowery et al. (US Patent No. 6,898,766 B2) (hereinafter referred to as Mowery) as applied to claim 1 above, and further in view of Bays et al. (US Patent No. 6,282,666 B1) (hereinafter referred to as Bays)

As mentioned above in the response to the rejection of claim 1, applicant points out that

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claims 3, 4 and 9-13 are dependent on claim 1, which is believed to be allowable by the applicant. Applicant therefore asserts that claims 3, 4 and 9-13 should too be found allowable for at least the same reasons as previously stated for claim 1. Reconsideration of claims 3, 4 and 9-13 is respectfully requested.

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Claims 6-8 are rejected under 35 USC 103a as being unpatentable over Saunders et al. (US Patent No. 6,654,896 B1) (hereinafter referred to as Saunders), Mowery et al. (US Patent No. 6,898,766 B2) (hereinafter referred to as Mowery) as applied to claim 1 above, and further in view of and further in view of Gulick (US Patent No. 5,974,492) (hereinafter referred to as Gulick)

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As mentioned above in the response to the rejection of claim 1, applicant points out that claims 6-8 are dependent on claim 1, which is believed to be allowable by the applicant. Applicant therefore asserts that claims 6-8 should too be found allowable for at least the same reasons as previously stated for claim 1. Reconsideration of claims 6-8 is respectfully requested.

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Claims 14 and 15 are rejected under 35 USC 103a as being unpatentable over Saunders et al. (US Patent No. 6,654,896 B1) hereinafter referred to as Saunders) in view of Mowery et al. (US Patent No. 6,898,766 B2) (hereinafter referred to as Mowery) as applied to claim 1 above, and further in view of Naveh et al. (US Patent Publication No. 2004/0210778) (hereinafter referred to as Navch).

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As mentioned above in the response to the rejection of claim 1, applicant points out that claims 14 and 15 are dependent on claim 1, which is believed to be allowable by the applicant. Applicant therefore asserts that claims 14 and 15 should too be found allowable for at least the same reasons as previously stated for claim 1. Reconsideration of claims 14 and 15 is respectfully requested.

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Claims 16-19 are rejected under 35 USC 103a as being unpatentable over Saunders et al.

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(US Patent No. 6,654,896 B1) (hereinafter referred to as Saunders), Mowery et al. (US Patent No. 6,898,766 B2) (hereinafter referred to as Mowery), and Bays et al. (US Patent No. 6,282,666 B1) (hereinafter referred to as Bays)

Similar to the above remarks concerning the rejection of claim 1, Applicant also asserts
5 that claim 16 should not be found unpatentable over Saunders, Mowery, and Bays for at least the reason that there is no motivation to combine said cited references to result in the present invention as claimed in claim 1.

Applicant points out that the teachings of Saunders as a whole are directed at "handling
of multiple compliant and non-compliant wake-up sources in a computer system" (see title),
10 while the teachings of Mowery as a whole are directed at "simplifying integrated circuits with a common communications bus" (see title). The Examiner stated that the motivation to combine said references is "doing so would give the added benefit of rapid integration of devices and peripherals into an integrated circuit through the combination of existing peripherals rather than creating a custom integrated circuit with a custom interface from
15 scratch". However, applicant asserts there are no non PCI compliant devices to be dealt with in the design of Mowery and there are likewise no first and second communication buses that need to be coupled in the design of Saunders. Therefore, the two inventions (i.e., of Saunders and Mower) when viewed as individual whole units do not suggest any benefit of combination and in fact appear to suggest against combining as they are both directed at
20 different problems.

For at least this reason, applicant asserts that claim 16 should not be found unpatentable in view of the teachings of Saunders, Mowery, and Bays. Specifically, there is no motivation to combine said cited references to result in the present invention. As claims 17-20 are dependent on claim 16, if claim 16 is found allowable, so too should dependent claims 17-20.
25 Reconsideration of claims 16-20 is respectfully requested.

Claim 20 is rejected under 35 USC 103a as being unpatentable over Saunders et al. US Patent No. 6,654,896 B1) (hereinafter referred to as Saunders), Mowery et al. (US

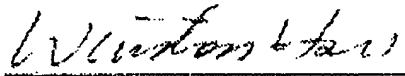
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Patent No. 6,898,766 B2) (hereinafter referred to as Mowery), and Bays et al. (US Patent No. 6,282,666 B1) (hereinafter referred to as Bays) as applied to claims 16-19 above, and further in view of Naveh et al. (US Patent Publication No. 2004/0210778) (hereinafter referred to as Naveh)

- 5 As mentioned above in the response to the rejection of claim 16, applicant points out that claim 20 is dependent on claim 16, which is believed to be allowable by the applicant. Applicant therefore asserts that claim 20 should too be found allowable for at least the same reasons as previously stated for claim 1. Reconsideration of claim 20 is respectfully requested.

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Sincerely yours,



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Winston Hsu, Patent Agent No. 41,526

- 15 P.O. BOX 506, Merrifield, VA 22116, U.S.A.

Voice Mail: 302-729-1562

Facsimile: 806-498-6673

e-mail : winstonhsu@naipo.com

- 20 Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)